ORIGINATION FORM
Proposed Revisions to the Specifications
(Please provide all information - incomplete forms will be returned)

Date: 7/11/23

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Article/Subarticle: 633-2.1.1.1,633-2.1.1.9.3,633-2.

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Associated Section(s) Revisions:

Will the proposed revision require changes to the following Publications:

Publication	Yes	No	Office Staff Contacted	Date
Standard Plans Index	○	◉	Rick Jenkins/Joshua Turley	7/11/23
Traffic Engineering Manual	○	◉	Mariano Amicarelli	7/11/23
FDOT Design Manual	○	◉	DeWayne Carver	7/11/23
Construction Project Administration Manual	○	◉	Patrick Overton	7/11/23
Basis of Estimate/Pay Items	◉	○	Ryan Gray	7/11/23
Structures Design Guidelines	○	◉	Ben Goldsberry	7/11/23
Approved Product List	○	◉	Karen Byram	7/11/23
Materials Manual	○	◉	Susan Musselman/Brad Pearson	7/11/23
Maintenance Specs	○	◉	Deanna Hutchison	7/11/23

Will this revision necessitate any of the following:

Design Bulletin ☐ **Construction (DCE Memo)** ☐ **Estimates Bulletin** ☐ **Materials Bulletin** ☐

Have all references to internal and external publications in this Section been verified for accuracy? YES

Synopsis: Summarize the changes:

Added requirements for Cat6 and composite cables. Updated references to external standards, removed duplicate content covered by referenced standards (e.g., duplication of ITU requirements, Telcordia requirements), removed cable strength testing requirements that are sufficiently addressed by material inspection and final end-to-end testing, and updated outside diameter of fiber cable to reflect dimensions of 144 and 288 count cables.

Justification: Why does the existing language need to be changed?

Incorporating requirements for Cat 6 and composite cables will reduce the amount of MSP requests received for these commonly used materials. Other edits to existing content are necessary to remove duplication with national standards, update references to those standards, and update outdated information so that the specification reflects the properties of cables currently available and commonly used.

Do the changes affect either of the following types of specifications (Hover over type to go to site.):

Special Provisions ☐ **Developmental Specifications** ☐

List Specifications Affected: (ex. SP3270301, Dev330TL, Dev334TL etc.)

Contact the State Specifications Office for assistance completing this form.

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1. **Are changes in line with promoting and making meaningful progress on improving safety, enhancing mobility, inspiring innovation, and fostering talent; explain how?**

Changes update outdated information and reflect the use of materials on projects.

2. **What financial impact does the change have; project cost, pay item structure, or consultant fees?**

Pay item structure must be updated to accommodate revisions.

3. **What impacts does the change have on production or construction schedules?**

No impact.

4. **How does this change improve efficiency or quality?**

Updates should improve general efficiency and quality by reducing the need for repeated MSPs.

5. **Which FDOT offices does the change impact?**

Traffic Engineering and Operations, Program Management, Construction.

6. **What is the impact to districts with this change?**

No significant impacts.

7. **Does the change shift risk and to who?**

No significant risk.

8. **Provide summary and resolution of any outstanding comments from the districts or industry.**

Comments and Responses are available on the Track the Status of Revisions hyperlink located on the Specifications landing page: https://www.fdot.gov/programmanagement/Specs.shtm

9. **What is the communication plan?**

Through the established specification revision process (e.g., Internal and Industry Review).

10. **What is the schedule for implementation?**

The Standard Specifications e-Book and Workbook are effective July 1st every year.

CONDUIT.
(REV 7-6-23)

SUBARTICLE 630-2.1 is deleted and the following substituted:

630-2 Materials.

630-2.1 Conduit: Use materials that have been tested and listed by a Nationally Recognized Testing Laboratory to the following industry standards:

Schedule 40 and 80 Polyvinyl Chloride (PVC)[1] ..... UL 651
Fiberglass Reinforced Epoxy[2] (below ground) ..... UL 2420
Fiberglass Reinforced Epoxy[2] (above ground) ..... UL 2515
Intermediate Metal[3] ..... UL 1242
Rigid Galvanized Metal[3,4] ..... UL 6
Rigid Aluminum[4] ..... UL 6A
PVC Coated Intermediate Metal[4] ..... ASTM A135/A135M,
..... ASTM A513, ASTM A568/A568M, NEMA RN1-2005
Liquid Tight Flexible Metal ..... UL 360
High Density Polyethylene (HDPE) Standard Dimension
Ratio (SDR) 9-11[5] ..... ASTM F2160
HDPE SDR 13.5[5] ..... ASTM F2160, NEMA TC-7
Schedule 40 and 80 HDPE ..... UL 651A

1. Use conduit with solvent weld slip-fit plastic couplings unless approved by the Engineer.

2. Use conduit having a minimum stiffness value of 250. Ensure that each section has a duct bell with an integral gasket on one end and a duct spigot on the other end.

3. Use conduit that is hot-dipped galvanized with a minimum coating of 1.24 ounces per square foot on both the inside and outside of the conduit. The weight of the zinc coating shall be determined using ASTM A90.

4. Use conduit with both ends reamed and threaded.

5. Can be used with preassembled cable and rope-in-conduit.